

REMARKS

Reconsideration is requested.

The undersigned acknowledges the election of the subject matter of the Examiner's Group I.

Claims 11-14 have been canceled, without prejudice. Claims 8-10 have been withdrawn from prosecution. Rejoinder and allowance of claims defining methods of making and/or using products defined by allowable claims at an appropriate time.

Claims 1-10 and 15-18 are pending. Claims 15-18 have been added. The amended claims find support, for example, on page 6 and 13, of the specification. With regard to claim 1, one of ordinary skill in the art will appreciate from the description of the invention on page 6, for example, that the Sn-Ag solder of the invention does not include Bi. Moreover, the descriptions of solders of the invention containing various ranges of Bi are believed to include the range recited in claim 3. The melting point range of claim 3 finds support, for example, in the specification on pages 6 and 13. No new matter has been added.

To the extent not obviated by the above amendments, the Section 103 rejection of claims 1-4 over Nagahara (U.S. Patent No. 4,737,197) in view of Moon (U.S. Patent No. 5,980,822) is traversed. Reconsideration and withdrawal of the rejection are requested in view of the above and the following distinguishing comment.

The Examiner is understood to believe that it would have been obvious to have used the solder of Moon to make the solar cells of Nagahara for safety reasons and to reduce oxidation. While the applicants do not believe the art would have motivated one

of ordinary skill in the art to have combined the references, the claims have been amended to further distinguish the claimed invention over the cited art.

Specifically, Moon is understood to teach the following leadless alloy solder compositions:

Embodiment No.	Bi %	Ag %	melting point (°C)
1	6.0	1.5	215
2	7.0	2.0	214
3	8.5	2.5	215
4	6	1.5	215
5	7.0	2.0	215
6	8.5	2.5	215
claimed	0.1-5	0.1-5	undisclosed

Interestingly, Moon's working examples (i.e., "Embodiments") fall outside Moon's claimed and generally described invention.

Independent claim 1, and claims dependent therefrom, are patentable over Nagahara in view of Moon as compositions of Moon require Bi. There was no suggestion in the cited art to make the claimed solar cell.

Independent claim 3, and claims dependent therefrom, are patentable over Nagahara in view of Moon as compositions of Moon require 5 or less mass % of Bi where a melting temperature is not described and compositions of Moon containing more than 5 mass % Bi have a melting temperature of 214-215°C. There was no suggestion in the cited art to make the claimed solar cell.

Independent claim 15, and claims dependent therefrom, are patentable over Nagahara in view of Moon as compositions of Moon containing more than 5 mass % of Bi contain 1.5 mass % or more of Ag. There was no suggestion in the cited art to make the claimed solar cell.

Independent claim 16, and claims dependent therefrom, are patentable over Nagahara in view of Moon as compositions of Moon containing at most 8.5 mass % of Bi. There was no suggestion in the cited art to make the claimed solar cell.

The claims are submitted to be patentable over the cited combination of Nagahara in view of Moon and withdrawal of the Section 103 rejection based on the same is requested.

The Section 103 rejection of claims 5-7 over Nagahara in view of Moon and Yoshida (U.S. Patent No. 4,256,513) is traversed. Reconsideration and withdrawal of the rejection are requested. Dependent claims 5-7 are submitted to be patentable over the cited art for the reasons noted above with regard to the rejection based on Nagahara and Moon. Yoshida is not believed to cure the deficiencies of Nagahara and Moon noted above. Withdrawal of the Section 103 rejection is requested.

The claims are submitted to be in condition for allowance and a Notice to that effect is requested. The Examiner is requested to contact the undersigned in the event anything further is required in this regard.

TANAKA et al
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Respectfully submitted,

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